SPACE CENTER
Roundup

February 25, 2000

VOL. 39, NO. 4 LYNDON B. JOHNSON SPACE CENTER, HOUSTON, TEXAS

Station Program passes major readiness milestone

Atlantis, Houston. You are 'Go' to perform critical activation of the U.S. lab.

NASA KSC Photo KSC-99PP-0263

In the Space Station Processing Facility, Marsha Ivins, a mission specialist on the STS-98 crew, inspects the U.S. laboratory with members of the laboratory's processing team. (above)

Paul Felker of Barrios Technology monitors operations during the tests. Felker is an ECLSS (Environmental Control and Life Support System) operator in the Mission Operations Directorate. (below left)

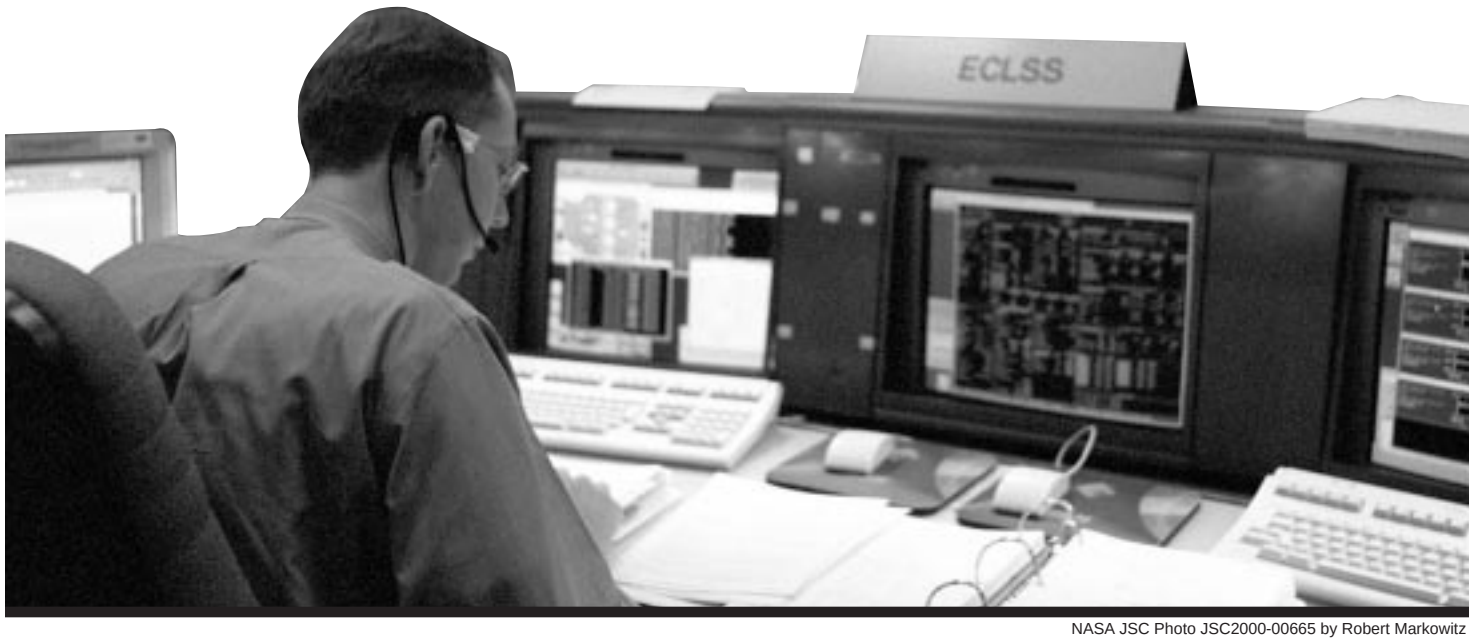
A team in Houston, Kennedy Space Center, and around the country recently completed the most comprehensive series of tests in the human space flight program since the first shuttle was tested before its initial flight. The successful results pave the way for the next station elements now on the ground to be launched this year.

"The test was unbelievably successful," said NASA Administrator Daniel Goldin at the conclusion of a February 7 press conference at NASA Headquarters. "This gives us confidence that we're really ready to build the station. We're ready to go and we're going to be launching this year."

Safely housed in the Space Station Processing Facility at the Kennedy Space Center, the software, equipment, and systems of three of the next major station elements, the Z1 and P6 truss elements and Destiny, the U.S. laboratory module, were joined together for an extensive set of flight-readiness testing with the space station Mission Control Center in Houston and the Payload Control Center at the Marshall Space Flight Center. Tying the station spacecraft to the control centers was the Tracking and Data Relay Satellite communications network.

"This has been a major accomplishment for the International Space Station Program in preparing for the assembly and operation of these key space station components on orbit and it passed beyond our expectations," said NASA STS-98 Lead Flight Director Rob Kelso. "This was the biggest interface test conducted between the MCC and a spacecraft since the late 1970s when we tested the space shuttle before STS-1. We could not be prouder of the results."

Two tests were conducted that involved hundreds of personnel at many NASA centers: Johnson Space Center, White Sands Test Facility, KSC, MSFC, and Goddard Space Flight Center. The first test, following the extensive Multi-Element Integration Test, was an end-to-end test to verify the ability of the MCC to command, control, and operate the combined three station elements. The second test was to conduct a "walk-through" of the planned STS-98 mission to verify both ground and crew procedures, which will be used in activating these three elements during flight.



NASA JSC Photo JSC2000-00665 by Robert Markowitz

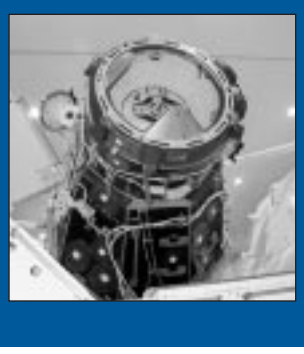
"We wanted to 'fly' the U.S. laboratory mission on the ground in conditions as close to flight as possible," said Kelso. "The launch of the U.S. laboratory ties all the other U.S. station elements together. It becomes the heart and brains to the U.S. systems, and thus it is one of the most critical flights in the early assembly of the space station."

With flight control teams directing the operation from Houston for this mission sequence walk-through, Astronaut Bill Shepherd, commander of the first ISS flight crew, and members of the STS-98 crew headed by Astronaut Ken Cockrell participated exactly as they would in flight by operating the flight elements at KSC. At the conclusion of the

Please see **STATION**, Page 7

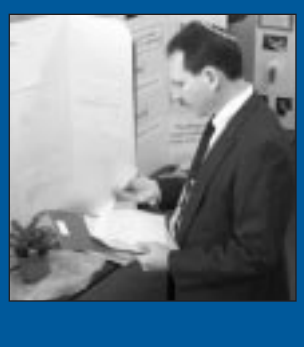
JSC planetary scientists receive award.

Page 2



Station hardware readies for flight at Cape.

Page 4



Employees judge Science Fair exhibits.

Page 7